

REVISED
PERFORMANCE WORK STATEMENT FOR
RADIOLOGICAL MULTIPLE AWARD CONTRACT (RADMAC II)
SOLICITATION N62473-15-R-0811, PTO-X001
27 JULY 2015

PARCEL C BUILDING 253 AND 211 RADIOLOGICAL REMEDIATION
AT HUNTERS POINT NAVAL SHIPYARD
SAN FRANCISCO, CA
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST
SAN DIEGO, CALIFORNIA 92132-5190

SECTION 1 - GENERAL

This Contract Task Order (CTO) is for preparation of planning documents, performance of radiological remediation and surveying, implementation of radiological controls, storage and handling of low-level radiological waste (LLRW) materials, and all associated reporting in order to achieve radiological unrestricted free release **of the areas specified as contaminated in the Internal Draft Characterization Reports for Buildings 253 and 211** located in Parcel C (Figure 1) from applicable regulatory agencies. Major tasks included in this CTO include, but are not limited to; **remediation/removal** and disposal of vertical and suspended interior drain lines remaining in the Buildings 253 and 211, **remediation/removal** of sub-surface drain lines from beneath and within the vicinity of the buildings, survey and sampling of the soil removed from the drain line trenches and the trenches themselves, and performing remediation of various building components as identified in the *Building 253 and 211 Radiological Characterization Reports, June 2015*, and performance of Final Status Surveys (FSSs) shall be performed on all remediated areas with the results compiled and documented in reports to support unrestricted free release.

The duration of work under this CTO shall not exceed 24 calendar months from the award date. The Department of the Navy (Navy) Naval Facilities Engineering Command Southwest (NAVFAC SW) will administer this contract, and the Base Realignment and Closure (BRAC) Program Management Office (PMO) West will manage the Work Elements under this CTO. The contractor shall work closely with the Naval Facilities Engineering Command Remedial Project Manager (RPM) and Radiological Affairs Support Office (RASO) Environmental Project Manager (EPM) throughout the execution of this CTO to ensure compliance with all Navy and regulatory agency requirements and successful project completion.

The Prime Contractor shall have a current Nuclear Regulatory Commission (NRC) and a California Agreement State Radioactive Material "Service Provider" (NRC License Tracking System Program Code 03219). All work shall be conducted under the licenses, which must be maintained current throughout the CTO period of performance. The contractor shall ensure that the NRC and State of California are notified of the site work at least 14 days prior to mobilization. Copies of the contractor's NRC and California Agreement State licenses shall be provided to the Navy along with approved Standard Operating Procedures. The contractor shall also establish their areas of control under a Memorandum of Understanding (MOU) with the current base-wide radiological contractor and the Navy.

In addition to safety, high quality documents, field work, and reports are of paramount importance. The contractor shall be responsible for all costs associated with responding to and resolving Navy comments on deliverables, regardless of the number of modifications and/or iterations necessary to achieve Navy approval, without additional funding. This includes work stoppages that are due to unsatisfactory or improper performance of field work activities. Following Navy concurrence, all regulatory agency review comments must be resolved. Successful project completion is defined as concurrence on the Final Status Survey (FSS) Report and Survey Unit Project Reports (SUPRs) and obtaining unrestricted free release of the sites by the United States Environmental Protection Agency (USEPA), California Department of Public Health (CDPH), and California Department of Toxic Substances Control (DTSC).

1.1 PERFORMANCE OBJECTIVE

The objective of this project is to achieve unrestricted free release **of the areas specified as contaminated in the Internal Draft Characterization Reports for Buildings 253 and 211 for:** 1) buildings 253 and 211, and 2) the trenches containing the remaining sewer and storm drain lines beneath and within 15 feet of buildings 253 and 211

footprints (including bulkhead- and overhead-mounted drain piping) from both the Navy and regulatory agencies including USEPA, DTSC, and CDPH.

In order to accomplish this objective, the Contractor shall prepare with Navy and regulatory concurrence planning documents, perform necessary remediation and remedial action support surveys and conduct final status surveys in accordance with the planning document requirements (under Section 2.4), and prepare with Navy and regulatory concurrence Survey Unit Project Reports (SUPRs) and a Final Status Survey (FSS) Report.

The Final Status Survey Reports should also include any additional surveys and possible remediation for any areas that are not included in the Internal Draft Characterization Report for Buildings 253 and 211.

1.2 BACKGROUND

Hunters Point Naval Shipyard (HPNS) is located in southeastern San Francisco on a peninsula that extends east into San Francisco Bay. HPNS consists of 866 acres: 420 acres on land and 446 acres under water in the San Francisco Bay. In 1940, the Navy obtained ownership of HPNS for shipbuilding, repair, and maintenance. After World War II, activities at HPNS shifted to submarine maintenance and repair. HPNS was also the site of the Naval Radiological Defense Laboratory (NRDL). HPNS was deactivated in 1974 and remained relatively unused until 1976. Between 1976 and 1986, the Navy leased most of HPNS to Triple A Machine Shop, Inc., a private ship repair company. In 1987, the Navy resumed occupancy of HPNS.

Buildings 253 and 211 are located in Parcel C. Composed of about 79 acres in the central portion of the shipyard (see Figure 1), Parcel C was formerly part of the industrial support area, and was used for shipping, ship repair, and office and commercial activities. Industrial support facilities for ship repair dominated the land use at Parcel C and included a foundry, a power plant, a sheet metal manufacturing shop, a paint shop, and various machine shops; 70 buildings are located within the boundaries of Parcel C (see Figure 1). The docks at Parcel C were formerly part of the industrial production area. Portions of Parcel C were also used by Naval Radiological Defense Laboratory (NRDL).

Building 253 is a six-story building constructed of concrete with a glass-curtain wall that was built between 1944 and 1947. The building has a large gantry for the craning of equipment to the upper stories and a periscope tower extending vertically from the sixth floor roof. Radiography and instrument calibration were conducted in Building 253 through 1974. A gauge shop; electronics, optical, and ordnance shops; a weapons shop; and an electrical shop were located in Building 253. Additionally, equipment from OPERATION CROSSROADS and Maritime Administration Ship Parts Storage was warehoused in Building 253. Historically, the fifth floor of Building 253 housed the ordnance shop, optical shop, gauge repair facility, and calibration range, and an accelerator was housed in the enclosed portion of the sixth floor. A wide variety of radioactive material was used in this building. Many of the optical parts of Department of the Navy (DON) equipment contained thorium-232 (^{232}Th) in the lenses. Radium-226 (^{226}Ra) was often used in ship gauges and dials.

Building 211 is a three-story, concrete-framed, curtain-walled building constructed in 1942. Building 253 was subsequently attached to Building 211 during its later construction. Building 211 is a large, warehouse-type building (323 feet long and 145 feet wide), with a large gantry for craning materials to the upper stories. The building was used as a machinery shop, electrical test/repair shop and a former contractor LLRW storage site (NAVSEA 2004). Attached to the south side of the building was a two-story structure that measured 189 feet long by 25 feet wide. This structure was unstable and was demolished in September 2013.

Buildings 253 and 211 are currently vacant and unoccupied.

As identified in Volume II of the Historical Radiological Assessment (HRA) (NAVSEA 2004), the radionuclides of concern (ROCs) are:

Building 253: cesium-137 (^{137}Cs), plutonium-239 (^{239}Pu), radium-226 (^{226}Ra), strontium-90 (^{90}Sr), and thorium-232 (^{232}Th).

Building 211: ^{137}Cs , ^{226}Ra , and ^{232}Th

The HRA may have inadvertently excluded ²³⁹Pu and ⁹⁰Sr as ROCs for Building 211, and therefore, these ROCs have been added for Building 211.

After thorough review of the operational history of Hunters Point Naval Shipyard and the review of the site-specific characterization data collected from 2012 to 2014, the Navy has determined that the building components including building drain lines and subsurface drain lines contain residual radioactive contamination. This determination is based on the Navy's review of the site specific characterization reports provided under Section 5 – Government Furnished Data. The contractor shall note that these reports are internal draft and are being provided for bidding purposes. The reports have not obtained final Navy and regulatory acceptance/concurrence and therefore are subject to change and revision.

The Navy is conducting this work under the Department of Defense Installation Restoration Program (IRP) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), along with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The Navy provides the contractor the procedures and methodology used in previous projects that are described in the *Basewide Radiological Management Plan, Hunters Point Shipyard, San Francisco, CA, (February 2012)*. Please note, currently, the Navy and State of California have agreed that alpha scan speeds for large area probes shall be determined utilizing Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), Appendix J, Formula (J-3), with "G" (source activity) limited to 300 dpm and probability not to be less than 90%. This may differ from that provided in the *Basewide Radiological Management Plan, Hunters Point Shipyard, San Francisco, CA, (February 2012)* or elsewhere.

This work falls under the *Basewide Radiological Removal Action Action Memorandum, Hunters Point Shipyard, San Francisco, California (Revision 2006)* (herein referred to as the *Action Memorandum*) or any subsequent revisions to this document (see Section 2.4.3). Additionally, all applicable NAVFAC SW Environmental Work Instructions (EWIs) are to be followed. Other applicable plans and reports are listed in Sections 4 and 5 of this PWS.

SECTION 2 - WORK ELEMENTS

The work elements under this PWS are identified as follows:

- Work Element 1 – Project Management and Project Meetings
- Work Element 2 – Project Infrastructure
- Work Element 3 – Planning Documents
- Work Element 4 – Remediation and Radiological Surveys
- Work Element 5 – Completion Reports
- Work Element 6 – Site Support Activities

2.1 WORK ELEMENT 1 - PROJECT MANAGEMENT AND PROJECT MEETINGS

2.1.1 PROJECT MANAGEMENT

This element shall include all general project management, infrastructure, performance bonding, and contract administrative support required to cost-effectively manage the CTO according to the project schedule and conveyance schedule for Parcel C.

Project management activities shall include, but are not limited to, the following.

- Provide schedule and monthly progress reports to the Navy RPM, the Naval Radiological Affairs Support Office (RASO), Resident Officer In-Charge of Construction (ROICC) Office, and BRAC Caretaker Site Office (CSO).
- Weekly project QA/QC meetings and meeting notes with ROICC personnel and CSO during field operations.
- Provide project updates via daily and weekly field reports via email to the Navy RPM and the RASO.
- Conduct conference calls at least once a week to update the Navy RPM and RASO on the project status.

- Coordinate work scope tasks and respond to Navy requests for information as they occur.
- Review, approve, and track project costs and prepare financial information.
- Develop and maintain project files.
- Maintain, update, and submit as-built drawings bi-weekly showing pipeline removal, survey, backfill, and building remediation progress.
- Conduct administrative project close-out contractual requirements.

The contractor shall review/update the project schedule weekly and provide as an electronic deliverable (email only). The updated schedule shall be coordinated with and approved by the Navy RPM. Deliverable requirements are included in Section 7.0 of this PWS. The contractor shall consider the timing of required deliverables in accordance with Section 7.0 when preparing the project schedule.

The contractor shall also discuss and distribute the approved project schedule at the weekly QC meeting. Coordination with other contractors may be required throughout this project. On an as-needed basis, coordinating efforts will be required with the Basewide Radiological Contractor, CSO, ROICC, BRAC, NAVFACSW, RASO and other Navy contractors. Examples of other contractors include: transportation and disposal contractor for low-level radioactive waste shipments, Parcel C TPH and CERCLA contractors, and the Basewide Groundwater Monitoring Program Contractor. The Contractor shall provide resources for non-radiologically licensed contractors and other visitors to enter the buildings.

Invoicing shall conform to the measurement and payment items described later in this PWS. Sufficient detail shall be provided to enable Navy to reconcile the costs with the negotiated schedule of values in order to make fair progress payments. Upon request, the Navy RPM or ROICC representative shall be provided with documentation that substantiates the basis of payment requests during construction.

2.1.2 PROJECT MEETINGS

2.1.2.1 KICK OFF MEETING

No later than fourteen (14) days after the Contract is awarded, the Contractor shall coordinate and attend a “kick-off” meeting at Hunters Point Naval Shipyard, San Francisco, California. Attendees of this meeting will include the Contractor Project Manager, Navy RPM, ROICC, CSO representative, RASO representative, and other project team members as available. The agenda for this meeting shall include discussion of site access, scheduling, safety, dust control, waste management and other issues related to implementing this CTO. The contractor shall provide all meeting materials including agenda, figures, and a draft project schedule. The project schedule shall be in Gantt Chart format covering all project activities. The agenda and other meeting materials shall be provided to all meeting attendees at least forty-eight (48) hours prior to the meeting. The contractor shall provide meeting minutes to the Government within ten (10) calendar days following the kick-off meeting.

2.1.2.2 BRAC CLOSURE TEAM (BCT) MEETINGS

This task shall include coordination with the Navy to address inquiries that arise during the course of work as well as technical support to the Navy at BCT meetings in San Francisco or Oakland. The contractor shall provide a PowerPoint presentation to the RPM and RASO five (5) working days prior to any BCT meeting to allow necessary revisions. As coordinated with the Navy RPM, the contractor shall provide a PowerPoint presentation that has been approved by the Navy and/or all required meeting handouts approved by the Navy. No BCT meeting minutes are required, but a brief summary of key points from the BCT meeting related to the project shall be provided to the Navy RPM. These short summaries documenting the key points determined at the meeting shall include figure(s), as appropriate, and shall be provided via e-mail to document decisions and further discussion with the regulatory agencies. Action items from the BCT meetings are typical, and the contractor shall provide the required support to address action items and BCT meeting questions.

2.1.2.3 CONTRACTOR INTEGRATION MEETINGS

The contractor will be required to attend two (2) coordination meetings held with multiple contractors and the Navy. During these formal contractor coordination meetings, the Contractor shall provide appropriate figures and presentations to facilitate coordination amongst the other contractors working on site. Presentations and supporting materials shall be provided to the Navy RPM at least 5 working days prior to any such formal coordination meetings.

2.1.2.4 COMMUNITY MEETINGS / BUS TOUR SUPPORT

The contractor shall attend community meetings in San Francisco as required to meet the objectives of the project and as coordinated with the Navy. Community meetings are either conducted via presentations to the public or bus tours. The number of meetings is determined based on the input and coordination with the community. Presentation meetings are conducted in the evening within the Hunters Point community and last approximately 2.5 hours. **Two** bus tours will be on a Saturday at HPNS and last approximately 5 hours. For either type of community meeting, the contractor shall provide a PowerPoint presentation that has been reviewed, revised as required, and approved by the Navy. Meeting handouts also reviewed and coordinated with the Navy may be required at each meeting. The contractor shall attend the full meeting and/or bus tour unless otherwise coordinated. Community meeting minutes and support equipment will be supplied under a separate contract. Presentations and supporting materials shall be provided to the Navy at least 30 working days prior to the meeting/tour.

2.2 WORK ELEMENT 2 – PROJECT INFRASTRUCTURE

2.2.1 PROCUREMENT

This element includes personnel and resources used in the procurement of the project equipment and materials. Equipment, materials and supplies that are used throughout the fieldwork will be procured and stored onsite at a safe location. Note: Charges for procurement shall be included in the cost of the equipment and materials under the various technologies and structure elements.

2.2.2 MOBILIZATION

This element includes the transport of equipment, personnel, and facilities to the site as well as construction of temporary facilities and utilities. Fieldwork shall not commence until the Contracting Officer has issued a Notice to Proceed (NTP) to the Contractor. The Contractor shall obtain all necessary permits and pay applicable permit fees. The Contractor shall utilize and reference Unified Facilities Guide Specifications (UFGS) 01 50 00, February 2009 for Temporary Construction Facilities guidelines. The Contractor shall notify the Nuclear Regulatory Commission of the intent to start work at least 14 days prior to mobilization or as required by their NRC and California Agreement State License.

2.2.3 SITE CLEANUP AND DEMOBILIZATION

The Contractor shall perform cleanup activities during progress of the Work, at the completion of the Work, and in accordance with the Basic Contract. The Contractor shall perform periodic cleanup to keep the building, site, field trailer office parking area and adjacent properties free from accumulations of waste materials, rubbish, and windblown debris resulting from the contractor's performance of the work. As a condition precedent to final acceptance of the Work by the Government, the Contractor shall be responsible for removal all of waste materials, rubbish, dust and windblown debris from the work areas and adjacent areas. All sidewalks and streets, especially the common areas, affected by the work shall be swept clean and returned to a condition that is acceptable to the ROICC. Upon finishing site cleanup and receiving concurrence from a site inspection by the CSO, ROICC, and document review by RASO and BRAC PMO the Contractor will ensure complete decontamination and screening of all equipment, demobilize equipment, personnel, and facilities equipment from the site in an orderly manner.

2.2.4 LOGISTICAL SUPPORT

Basewide logistical support shall include the costs associated with rental of an appropriate number of field trailers and other costs associated with Contractor field operations support (e.g. copiers, trailer utilities, etc.). The period of logistical support is intended to support field work and not necessarily the entire period of performance.

The Government will provide a designated laydown area near the work site. The Contractor shall provide and maintain administrative field office facilities within the laydown area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel. The Contractor shall be responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area.

The Contractor shall obtain the necessary permits for connections to necessary services provided by utility companies serving the project area.

Overnight and weekend site security during the field work duration is required to prevent improper access to the buildings and work areas.

2.3 WORK ELEMENT 3 - PLANNING DOCUMENTS

The Contractor will develop appropriate planning documents outlining their approach for completing this PWS. For all planning documents the Contractor shall provide the Navy with a MS Word version of the document in track changes mode for all working files during the editorial phases between Internal Draft, Draft, and Final. The Contractor shall prepare official Response to Comments to Navy and BCT members who submit formal comments for both the Draft and Final versions of each document listed below. Document distribution requirements are listed in Section 7.0 of this PWS.

2.3.1 WORK PLAN

The contractor shall develop a work plan that provides detail as to how they will perform the work under this PWS. In some areas of the building, extensive radiological contamination is known. Work shall be conducted to meet the requirements set forth in the *Action Memorandum (Revision 2006)* or subsequent revisions to this document as described in Section 2.4.3. The work plan shall include, at a minimum, procedures to perform necessary radiological remediation, remedial action surveys, and final status surveys for both the building (including suspended piping) and the sanitary sewer and storm drain system within and outside Buildings 253/211. Radiological surveys shall be conducted in accordance with Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) guidance along with Navy/regulatory agency input.

The work plan shall include procedures for concrete removal and radiological surveying of excavated soils. Any engineering parameters and technical calculations in support of the building surveys and sanitary sewer and storm drain removals shall also be provided in the work plan. In addition, several appendices/or sister documents to the work plan will be required as described in the subsections below.

2.3.1.1 WORK INSTRUCTIONS

The contractor shall prepare work instructions for each building survey unit (SU) that is determined to be contaminated. The work instructions shall be prepared such that the decontamination/remediation would be confirmed and a follow on survey would be adequate to serve as a Final Status Survey. Each work instruction shall be adequate in scope to facilitate all surveys and decontamination/remediation for the survey unit. Site specifics such as identification of survey units and survey unit classifications shall be provided. The work instructions shall address both the building structure and items left in the building (such as suspended piping) that may be radiologically impacted so that at project completion the building can be released for unrestricted reuse.

2.3.1.2 SAMPLING AND ANALYSIS PLAN

The Contractor is required to prepare a Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP) before conducting field sampling. The SAP shall be written in accordance with applicable regulatory guidance documents and NAVFAC Environmental Work Instructions (EWIs). In addition, the SAP shall be reviewed and approved by the NAVFAC Quality Assurance Officer (QAO) and the RASO prior to regulatory review and field implementation. The contractor shall submit the draft SAP for review and signature from the Navy QAO using the SAP Review module in the Navy Installation Restoration Information Solution (NIRIS). The SAP shall be prepared in accordance with appropriate NAVFAC SW Environmental Work Instructions (EWIs) (including, but not limited to EWI #2: Policy for review, approval, revision, amendment of Sampling and Analysis Plans, and EWI #6: Environmental Data Management and Required Electronic Delivery Standards - establishes Naval Electronic Data Deliverable (NEDD) as a new standard for electronic data deliverables for Environmental Restoration projects and provides guidance for uploading these deliverables to NIRIS through the internet).

2.3.1.3 QUALITY ASSURANCE / QUALITY CONTROL PLAN

The Contractor will write a project specific Quality Assurance and Quality Control (QA/QC) Plan as per UFGS 01 45 02/00, Nov. 2008 or (Latest Version). At a minimum the Contractor will include:

A description of the quality control organization, including a chart showing lines of authority; The name, qualifications, duties, authorities, and responsibilities of each person assigned a QC function; A schedule for managing submittals, testing, inspections, and any other QA function (including those of Contractors, Subcontractors, fabricators, suppliers, purchasing agents, etc.) that involves assuring quality workmanship, verifying compliance with the plans and specifications, or any other QC objectives. A quality assurance surveillance plan (QASP) shall be developed and implemented for conducting inspections to verify compliance with all **work elements** and planning document requirements (under Section 2.4). Reporting will include such items as daily summary reports with field work and corresponding site photos schedule of data submissions, inspection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation; A list of definable features of the work to be performed consistent with the Measurement and Payment section of this PWS shall also be developed. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements. Upon the acceptance of the final plan by the ROICC, QA/QC Plan shall be issued a minimum of 30 days prior to a CQC pre-construction meeting for site mobilization. Reports shall be provided to the ROICC and Navy RPM.

2.3.1.4 RADIOLOGICAL MATERIALS AND WASTE MANAGEMENT PLAN

The Contractor shall prepare a radioactive materials and waste management plan to outline the day-to-day management of radioactive materials such that support material required for instrumentation calibration, along with handling of material collected from the field for storage and/or transportation and disposal is appropriately managed. All applicable regulatory requirements for waste management must be incorporated into the plan. A Memorandum of Understanding (MOU) will need to be agreed upon by the contractor and the HPNS Basewide Radiological Contractor (under separate contract) to ensure proper radiological materials handling responsibilities. The contractor shall be responsible upon award for contacting the HPNS Basewide Radiological Contractor and coordinating the MOU revisions to cover this work effort. The contractor shall provide a draft of this MOU revision to the Navy and the **HPNS** Basewide Radiological Contractor for review within 30 days of contract award and coordinate any required revisions. The contractor shall assume that this document will only be submitted via e-mail. The Contractor shall be in compliance with the requirements of the NAVFACSW EWI #8 as applicable.

2.3.1.5 ACCIDENT PREVENTION PLAN, SITE SAFETY AND HEALTH PLAN, AND RADIATION PROTECTION PLAN

Providing a work environment that maintains the health and safety of working personnel at the shipyard is the Navy's number one priority. The Contractor shall maintain a health and safety program that encourages the prevention of all work-related accidents and exposure to radiological contamination. An appropriate Site Safety and Health Plan (SSHP) shall be developed with appropriate references to work plans, Accident Prevention Plans (APPs), SSHP elements, and Activity Hazard Analyses (AHAs).

The Contractor shall complete a stand-alone Accident Prevention Plan (APP), a SSHP and a Radiation Protection Plan (RPP).

The RPP shall outline the day-to-day management, surveying, health and safety concerns, training requirements, standard operating procedures (SOPs), material handling requirements, and project site controls. At a minimum, the RPP will summarize radiological controls and specifics to: 1) project work objectives 2) contractor policies and SOPs 3) scope of work requirements 4) radiation protection personnel requirements 5) contamination control 6) instrumentation and equipment 7) work permits, credentialing, and licensing 8) record keeping 9) planned exposures 10) decontamination procedures 11) radionuclide analysis and 12) and emergency response procedures for the radiologically impacted buildings and areas under this PWS. Each contractor and subcontractor employee must review the RPP prior to mobilization and start of fieldwork activities

The APP and SSHP shall be submitted in the formats as required by the US Army Corps of Engineers' EM 385-1-1 manual. The RPP shall have the standard operating procedures to conduct the work per the radiological services licenses and site specific operating procedures that may be specific to the work for this CTO. The RPP requires RASO review and approval. There are overlapping elements when preparing both APP and SSHP as provided in the Army's manual. The SSHP elements that overlap with the APP elements need not be duplicated provided each safety and health issue receives adequate attention and is documented in the APP/SSHP. The title of the plan shall be APP/SSHP and shall include all elements and sub-elements, including the AHA (Activity Hazard Analysis), as stated in the manual. In addition, the Contractor shall comply with the requirements of the UFGS (Unified Facilities

Guide Specifications) 01 35 26 (Feb 2012 or (latest version). The APP/SSHP will provide a safe and healthful environment for all personnel involved as well as personnel working near the sites. Each contractor and subcontractor employee must review the APP/SSHP prior to mobilization and start of fieldwork activities.

An *Internal Draft Final* and *Final* APP/SSHP/RPP will be submitted according to the schedule, and will be printed under a separate cover from the Work Plan. The APP/SSHP/RPP shall be immediately accessible to all workers at the site at all times during the project, and hard copies shall be located adjacent to the Contractor's Safety and Health Bulletin board on site and available in every vehicle utilized for work under this Task Order.

The Contractor shall conduct an annual review of the APP/SSHP/RPP; the AHAs shall be "living" documents in that changes in the field will be documented and added to the AHAs as field change notices. The APP/SSHP shall be amended as appropriate and must be reviewed and accepted by the Navy RPM, ROICC, NAVFAC Command Safety Officer, and Navy and Marine Public Health Center (NMPHC) Safety Officer. Any amendments to the RPP will also require review and approval by RASO.

2.3.1.6 STATE HISTORICAL PRESERVATION OFFICE (SHPO) LETTER

The contractor shall have an approved archeological resource personnel produce a letter to SHPO notifying them of the potential impacts from the radiological surveys and remediation under this PWS. The focus of this effort will be on sewer and sanitary storm drain removals and remediation in and near Zone 4. Zone designations are illustrated in the MOA figure included under Section 5 of this PWS. The letter shall provide background information including environmental and archeological setting and describe how the field work activities will be monitored in accordance with guidance provided in the *Basewide Radiological Archaeological Monitoring and Discovery Plan, Hunters Point Naval Shipyard, San Francisco County, California (AMDP) (King 2012)*. The letter must be provided as an internal draft to the Navy for review and concurrence prior to submission to SHPO. SHPO concurrence is required before excavations and surveys can begin in archaeological zones. Monitoring progress reports shall be included in the field daily reports during field activities.

2.3.2 ENVIRONMENTAL PROTECTION PLAN

The contractor is required to provide an Internal Draft, Draft, and Final Environmental Protection Plan that includes two main parts, the Storm Water Management Plan (SWMP) and the Dust Control Plan. These plans will meet the substantive requirements of the appropriate storm water and dust mitigation applicable, relevant, and/or appropriate regulations (ARARs). All applicable NAVFACSW EWI's shall be followed.

2.3.2.1. STORM WATER PROTECTION

Development of a Storm Water Management Plan (SWMP) or a Water Pollution Control Plan (WPCP) will be required. The contractor shall determine what type of plan is required based on the project scope. At a minimum, the SWMP or WPCP may require a site description, Best Management Practices (BMPs) to be implemented for construction activities, BMPs to be implemented for erosion and sediment control, waste management and disposal spill responses, post-construction controls, site inspection and monitoring programs, responsible personnel, training requirements, and certifications and compliance requirements. The contractor shall be responsible for ensuring the plan meets the requirements of the State of California for storm water discharges from construction sites. The contractor shall submit the plan along with any required Notice of Intents, Notice of Termination, and appropriate permit fees, to the appropriate State agency for approval, a minimum of 14 calendar days prior to the start of construction. A copy of the approved plan shall be kept at the construction on-site office, and continually updated as regulations are required to reflect current site conditions.

2.3.2.2. DUST CONTROL PLAN

Dust control is a primary concern in the community. Generation of dust from work activities must be kept to an absolute minimum. This includes the spread of soil from trucking operations. All trucks used as in this project must be tarped – empty or full. There are no exceptions. A Dust Control Plan (DCP) shall be developed. A model Basewide Dust Control Plan has been developed for sewer and storm drain excavations and radiological screening yard activities in Parcels G, UC-1, UC-2, and D-1. It may be used for guidance. The DCP will address the substantive requirements of air quality ARARs for construction and environmental remediation operations at Hunters Point Naval Shipyard, and Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations, California Code of Regulations, Title 17 Section 93105. The primary focus of the

DCP will be on dust mitigation requirements, along with dust control practices and air monitoring. Dust control may require coordination with other contractors operating at Hunters Point Naval Shipyard. Appropriate air monitoring requirements shall also be provided in the DCP. Air monitoring will consist of upwind and downwind monitoring points. Analytes to be monitored are manganese, TSP, asbestos, PM10, radionuclides of concern, and lead.

2.3.3 ACTION MEMORANDUM REVISION

The Contractor shall develop a revision to the *Final Basewide Radiological Removal Action – Action Memorandum, Hunters Point Shipyard, San Francisco, California (Revision 2006)*. The revision shall focus on revising the release criteria set forth in Table 1 for any or all of the specified media (i.e. soil, surfaces, and/or groundwater). The Contractor shall develop a recommendation in consultation with the Navy for revising these criteria. Once approved by the Navy, the revised document will require review and approval by USEPA, DTSC, CDPH, and the Waterboard.

2.4 WORK ELEMENT 4 – REMEDIATION AND RADIOLOGICAL SURVEYS

The Contractor will conduct field operations as outlined below and as specified in the planning documents under Section 2.4. During the conduct of field operations, the Contractor will actively implement their radiological controls plan maintaining a secure radiological control area. The Contractor will also implement their environmental protection plan to ensure compliance with the CERCLA Storm Water Plan, dust control plan, and air monitoring measures. The three major tasks in this work element are but not limited to; survey and remediation/removal of sub-surface sewer and storm drain lines, vertical and suspended drain piping within the building interior (such as bulkhead- and overhead-mounted drain piping), and remediation of contaminated areas identified in the building interior as detailed in the *Building 253 and 211 Radiological Characterization Reports, June 2015*. The contractor shall note that these reports are internal draft and are being provided for bidding purposes. The reports have not obtained final Navy and regulatory acceptance/concurrence and therefore are subject to change and revision.

2.4.1 SEWER AND STORM DRAIN REMEDIATION

The Contractor shall, sample, survey, remediate, backfill, and remove or restore the remaining subsurface sanitary sewer and storm drain (SS/SD) lines associated with Buildings 253 and 211 in accordance with the Work Plan.

2.4.1.1 PREPARE THE WORK AREA

The Contractor will coordinate with the Navy RPM, CSO, ROICC, and RASO prior to preparing work areas. The Contractor will need to establish a site controlled radiological work area around Buildings 253 and 211 in accordance with the planning documents and licensing requirements.

Underground utility clearance shall be completed prior to initiating intrusive activities. The Contractor shall:

- Review utility maps
- Use geophysical methods, including electromagnetic induction, magnetometry, and ground-penetrating radar, to clear Contractor's proposed limit of intrusive activity of potential subsurface obstructions prior to soil excavation or saw cutting.
- Mark the proposed limits of intrusive activity and the utility lines in the immediate vicinity, using color-coded surveyor paint.
- Notify Underground Service Alert and schedule a meeting with all interested parties that will potentially be affected by excavation activities.

2.4.1.2 EXCAVATE AND REMEDiate THE SEWER AND STORM DRAIN SYSTEM

The Contractor will excavate and remediate/removal the sewer and storm drains as outlined by the planning documents under Section 2.4. The SS/SD lines located inside the buildings will require concrete removal. The Navy estimates that the reinforced concrete thickness varies from 16 to 36 inches. Radiological survey of the removed concrete shall be required to release as non-radiological waste. Soil generated during the pipe removal trenching activities will require chemical and radiological screening and sampling to determine suitability for

backfill. Radiological screening procedures will be required for all peripheral soils within the excavated trench line beneath the concrete to one foot below the pipe. Sanitary sewer and storm drain line removal may be required both within the building interior, and extending to approximately fifteen (15) feet outside the building's exterior footprint. The *Survey Unit Progress Reports (SUPRs)* referenced in Section 5 of this PWS include as-built figures showing the termination point of previous removal projects in the vicinity of Buildings 253/211. The contractor shall complete the sewer and storm drain remediation/removal up to these former termination points.

The Contractor under this PWS and their licensing requirements is responsible for material handling, screening, characterization and management of excavated peripheral soil, overburden soils, and sewer and storm drain piping within the controlled radiological work area. The Contractor shall have access to RSY 3 located in Parcel E. The material requiring screening is transported to the RSY, spread on screening pads, screened, sampled, characterized as LLRW or other waste type and managed accordingly.

2.4.1.3 SAMPLE, SURVEY, AND REMEDIATE

The Contractor will sample and survey the excavation trench, overburden soil, peripheral soil, sewer pipe, storm drain pipe, manholes and sediment. Attachment 1 of the *Basewide Radiological Management Plan, February 2012*, outlines the general approach used previously for sampling and surveying sewer and storm drains during radiological removal actions at Hunters Point Naval Shipyard. Survey Units are to be laid out and sampled by the Contractor. Survey Units are not to exceed 1,000 m². The Contractor will utilize a sampling and survey plan that shall obtain unrestricted free release and site closeout in the State of California.

The contractor may establish control of RSY 3 in Parcel E, depending on their need, under a Memorandum of Understanding (MOU) with the current onsite Basewide Radiological Contractor and the Navy. For material requiring screening in RSY 3, the Contractor shall transport material from the Parcel C work area to the RSY 3 in Parcel E. Once material has been transferred over to the RSY, the Contractor shall perform appropriate screening, sampling, laboratory processing, data package production, remediation, and waste handling. The Contractor will submit appropriate data packages and coordinate with the RASO and the Navy RPM for clearing material for backfill after screening and remediation in RSY 3.

Following completion of excavation activities, a Final Status Surveys (FSS) of the trench survey units will be completed. The results from the FSS will be reviewed by BRAC PMO and RASO to determine whether further remediation is required or whether backfill of the trench survey unit may occur. Should the remediation goals set forth in the *Action Memorandum (Revision 2006)* or any subsequent revisions to this document (See Section 2.4.3) or the Work Plan (under Section 2.4.1) requirements not be met, the Contractor will perform remediation and additional excavation until remediation goals have been met and approved by the Navy and regulators for unrestricted free release.

Materials found to be clear of radiological and chemical contamination (see below for criteria) will be stockpiled outside RSY 3 in Parcel E for transport back to the origin of excavation for backfill and site restoration.

2.4.1.4 BACKFILL AND RESTORE SITE CONDITIONS

Upon receiving authorization from RASO to backfill a trench, the Contractor shall backfill and compact the trench in preparation for restoration of the site.

Soil from an IR site that has been screened and cleared out of RSY 3 and meets the *Parcel C Backfill Acceptance Plan, March 2015* may be stockpiled in the vicinity of RSY 3 for use as backfill. Non-IR site soil may be used as backfill after it is radiologically cleared. Material that was excavated and processed through RSY 3 will be tracked and returned to the approximate location it was initially excavated. Should not enough backfill material be available from screened and cleared excavated material, the Contractor shall utilize backfill material from an outside source that meets the *Parcel C Backfill Acceptance Plan, March 2015*. The Contractor will also be responsible for sourcing material to bridge the groundwater table. It is not necessary to return the interior of the building to pre-remediation conditions, but the remediation shall be conducted so that it does not affect the structural integrity/stability of the building. For example it may be necessary to replace small areas of the floor if removed due to contamination or structurally reinforce the floor from below (if on the second floor) to ensure stability of the flooring. However, no load-bearing walls shall be compromised or removed.

2.4.2 RADIOLOGICAL BUILDING REMEDIATIONS AND SURVEYS

The Contractor shall follow the methods and procedures for conducting remediation and surveying at Buildings 211 and 253 as outlined in the planning documents under Section 2.4. Based on the *Building 253 and 211 Radiological Characterization Reports, June 2015*, the areas of known contamination shall be remediated. Remediation shall be performed in a manner such that nearby survey units are not cross contaminated.

Following remediation, the contractor will be required to perform remedial action support surveys to verify that all contamination was removed. A Class I survey shall then be performed on that survey unit and additional Class II and Class III surveys shall be established as necessary around the areas of known contamination in order to achieve a completed final status survey for all components of each building. The survey units that do not contain contamination are already considered complete.

Piping is located on all six floors of Building 253. Piping removal may need to be performed to obtain unrestricted free-release. If removal is necessary, it must be conducted in a manner such that nearby survey units are not cross contaminated by the removal activities. All piping components and contents will be placed in a LLRW bin and disposed of by another contractor.

2.4.3 QUALITY CONTROL

The contractor is responsible for conducting QA/QC audits and inspections as specified in the QA/QC Plan and the quality surveillance plan during fieldwork to ensure the work conforms to project requirements specified in planning documents such as the Work Plan, SAP, and Work Instructions. Audit and inspection reports shall be submitted to the Navy, including the RPM, Contracting Officer, RASO, ROICC and CSO within 5 working days of each audit.

2.4.3.1 INSPECTION REQUIREMENTS FOR WORK ACTIVITIES

1. The contractor will provide and maintain an inspection system/plan that is acceptable to the Navy.
2. The contractor is responsible for performing all inspections and tests necessary to substantiate that the services furnished under this contract conform to the CTO requirements, including any applicable technical requirements in the work documents;
3. The Navy or a Navy appointed 3rd party contractor has the right to inspect and test all work called for by the CTO, to the extent practicable at all places and times, including at any time during the period of performance, and in any event before acceptance. The Navy may also inspect the premises of the contractor or any subcontractor engaged in contract performance. The Navy shall perform inspections and tests in a manner that will not unduly delay the work.
4. Inspections and tests by the Navy does not relieve the contractor from responsibility for services or other failures to meet the contract requirements that may be discovered before acceptance. Acceptance shall be conclusive, except for latent defects, fraud, gross mistakes amounting to fraud, or as otherwise specified in the contract. If acceptance is not conclusive for any of these causes, the Navy, in addition to any other rights and remedies provided by law, or under other provisions of this contract, shall have the right to require the contractor:
 - a. At no increase in contract price, to correct the nonconforming work at the original point of delivery, and in accordance with a reasonable delivery schedule as may be agreed upon between the contractor and the Contracting Officer; provided, the Contracting Officer may require a reduction in contract price if the Contractor fails to meet such delivery schedule; or
 - b. Within a reasonable time after the Contractor's receipt of notice of nonconformance, to repayment of such portion of the contract price as is equitable under the circumstances if the Navy elects not to require correction.

2.5 WORK ELEMENT 5 - COMPLETION REPORTS

For all completion reports the Contractor shall provide the Navy with a MS Word version of the document in track changes mode for all working files during the editorial phases between Internal Draft, Draft, and Final. Completion

reports require high quality representation of field conditions and survey results, to include accurate post remediation and or demolition as-built figures. All supporting working files, (i.e. CADD, GIS, VSP, Excel, etc.) will be provided in their native formats at the end of the contract. The Contractor shall prepare official Response to Comments to BRAC, RASO and BCT members who submit formal comments for both the Internal Draft and Draft versions. Document distribution requirements are listed in Section 7.0 of this PWS.

2.5.1 SURVEY UNIT PROJECT REPORTS

The Contractor will compose a Survey Unit Project Report (SUPR) for each sanitary sewer and storm drain SU developed and investigated during the execution of this PWS. The Contractor may combine the SUPRS into packages for transmittal.

The SUPR shall be based off of the *Survey Unit Project Report Abstract for the Sanitary Sewer and Storm Drain Removal Project, Hunters Point Shipyard, San Francisco, California, July 2013*. The Contractor is to prepare the SUPRs as Internal Draft, Draft, and Final.

2.5.2 FINAL STATUS SURVEY REPORT

The Contractor shall prepare and finalize a Final Status Survey Report for Building 253 and 211 (one, combined report) to obtain unrestricted free release and document attainment of free release requirements **for the contaminated areas described in the Internal Draft Characterization Report for Buildings 253 and 211.** This effort includes combining the data from the *Building 253 and 211 Radiological Characterization Reports, June 2015* with **any** data collected under this CTO to develop a complete FSS report.

The FSS shall present the conceptual site model for Building 253 and 211, the nature and extent of radiological contamination remediated, provide a summary of remaining risks following removal, remediation, and final status surveys, provide a robust ALARA (As Low As Reasonably Achievable) analysis, and provide sound justification for unrestricted free release from USEPA, DTSC, and CDPH.

2.6 WORK ELEMENT 6 – SITE SUPPORT ACTIVITIES

The Contractor will provide site support activities for a period of 24 months of site support.

2.6.1 WASTE MATERIAL MANAGEMENT

The Contractor shall follow waste management requirements set forth in the planning document under Section 2.4. All applicable regulatory requirements for waste management must be adhered to and implemented.

2.6.1.1 RADIOLOGICAL/MIXED WASTE

Radiological and mixed wastes are to be properly characterized and stored for disposal. The Contractor is responsible for the proper characterization, interim storage and management of LLRW. Bins required for bulk storage of radiological/mixed wastes will be provided under separate contract but coordination activities will still be required. Assume disposal facility sampling for waste characterization will be performed by the US Army Joint Munitions Command (USAJMC) contractor. Coordination efforts with the RASO, Navy RPM, the USAJMC, and the radiological waste contractor will be required. The Contractor will coordinate and ensure appropriate radiological waste handling procedures are conducted within their controlled radiological work area. The Contractor will prepare a waste information sheet for each waste source detailing the existing analytical information available or expected to be generated for each waste storage unit (drum, bin, etc.) as well as information on the wastes (source area, filed instrument readings, on-site laboratory results, etc.). Currently procurement of the containers, manifesting, transportation and disposal is all arranged by the radiological waste broker. The radiological waste is to be stored under a broad scope license authority until transported by the USAJMC's designated radiological waste transportation and disposal contractor. Applicable NAVFACSW Environmental Work Instructions regarding LLRW are to be observed.

2.6.1.2 NON-RADIOLOGICAL WASTES

The contractor shall be responsible for waste management, characterization sampling, stockpiling, storage, and offsite transportation and disposal of non-radiological soil and debris in accordance with the

planning documents. These efforts will be associated with non-radioactive waste generated from the sewer and storm drain removals under this PWS and any other general waste encountered or generated in the performance of the work. All construction debris and chemical waste material is to be stockpiled or packaged in appropriate containers and staged in approved areas. Coordination efforts between the CSO and the ROICC will be required.

SECTION 3 - SPECIAL CONDITIONS

- 3.1** “Section 2912 of the FY 1994 Defense Authorization Act (Pub. L. 103-160) establishes the following preference for business located in the vicinity of base closure and alignment work:

(a) Preference required – In entering into contracts with private entities as part of the base closure or realignment of a military installation under a base closure law, the Secretary of Defense shall give preference, to the greatest extent practicable, to qualified businesses located in the vicinity of the installation and to small business concerns and small disadvantaged business concerns. Contracts for which this preference shall be given shall include contracts to carry out activities for the environmental restoration and mitigation at military installations to be closed or realigned.”

DFARS Subpart 226.71 and 226.72 implement the requirements of Section 2912 of the FY 1994 Defense Authorization Act.

“Section 817 of the 1994 Defense Authorization Act) Pub L. 103-337) authorizes the Secretary of Defense to give preference to entities that plan to hire local residents when entering into contracts for services to be performed at a military installation that is affected by closure or management under a base closure law.”

DFARS Subpart 226.7104 implements the requirements of Section 817 of the FY 1995 Defense Authorization Act) Pub. L. 103-337). DFARS 226.7104 states:

“When planning for contracts for services related to base closure activities at a military installation affected by a closure or realignment under a base closure law, contracting officers shall consider, including, as a factor in source selection, the extent to which offerors specifically identify and commit, in their proposals, to a plan to hire residents in the vicinity of the military installation that is being closed or realigned.”

The Government hereby makes it a condition of this award that the prime Contractor shall abide by the federal laws mentioned herein. The prime Contractor shall provide an explanation of all efforts and results to award subcontracts and hire personnel within the vicinity of Hunters Point Naval Shipyard, San Francisco, California. Vicinity, as defined in this award, refers to the following three postal zip codes: 94124, 94134, and 94107.

- 3.2** All requirements of the basic contract, in addition to those specifically mentioned in this scope of work, remain in full force and effect.
- 3.3** Minutes of regulatory agency, Navy and/or Activity meetings shall be submitted to the RPM within ten (10) calendar days after the conclusion of each meeting.
- 3.4** Public Affairs – The Contractor shall not disclose any data resulting from action in this contract to the news media or public. The Contractor shall refer all press or public contacts to the Activity POC and shall notify the RPM of their actions. The Contractor may not distribute reports or data to any other source, unless specifically authorized by the Public Affairs Officer in accordance with NAVFAC Instruction.
- 3.5** Any oral directions, instructions, explanations, commitments and/or acceptances given by any government employee to the Contractor or his personnel shall not be construed by the Contractor as a scope change to this proposal scope of work. Only the Contracting Officer has the authority to make changes to the CTO. All changes shall be issued by the Contracting Officer in writing.
- 3.6** The Contractor shall make every effort to prevent the spread of contamination or release of contaminants to the environment in accordance with federal, state, and local laws, regulations and instructions.

3.7 Forward all deliverables to the Navy RPM.

3.8 The Contractor's cost proposal format shall be in accordance with the cost estimate format provided in the solicitation Attachment J-4.

3.9 52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of **(See Table below for calculation)** for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

Project Cost	Estimated Liquidated Damages Per Calendar Day
\$2,000 - 25,000	\$80
\$25,000 - 50,000	\$110
\$50,000 - 100,000	\$140
\$100,000 - 500,000	\$200
Each Additional \$100,000 - add \$50	

(End of clause)

SECTION 4 – REFERENCES

- 20 CFR 1910.120 (Hazardous Waste Operations and Emergency Response)
- EM 385-1-1 US Army Corps of Engineers Safety and Health Requirements
- Manual Navy/Marine Corps Installation Restoration Program Manual
- NAVFAC QUALITY CONTROL UFGS 01 45 02/00 Nov/08 or (Latest Version)
- GOVERNMENTAL SAFETY REQUIREMENTS UFGS SECTION 01 35 26, Feb/12 or (Latest Version)
- Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (NUREG 1575)
- NAVFACSW Environmental Work Instructions (EWIs) #1 – 9

SECTION 5 – GOVERNMENT FURNISHED DATA:

- Figure 1, Bldg. 253 and 211, Parcel C (CD ROM)
- Hunters Point Historical Radiological Assessment, Vol. 2, August, 2004 (CD ROM)
- Basewide Dust Control Plan (November 2010) (CD ROM)
- Basewide Radiological Removal Action Memorandum, Hunters Point Shipyard, San Francisco, California, Revision 2006 (CD ROM)

- Basewide Radiological Management Plan, Hunters Point Shipyard, San Francisco, CA, February 2012 (CD ROM)
- Parcel C Backfill Acceptance Plan, March 2015 (CD ROM)
- Memorandum of Agreement among US Navy and SHPO and Exhibit 1: Archeological Sensitive Zones (CD ROM).
- Basewide Radiological Archaeological Monitoring and Discovery Plan, Hunters Point Naval Shipyard, San Francisco County, California (AMDP) (King 2012) (CD ROM)
- Building 211 Radiological Characterization Report (Internal Draft), June 2015 (CD ROM)
- Building 253 Radiological Characterization Report (Internal Draft), June 2015 (CD ROM)
- Survey Unit Project Report Abstract for the Sanitary Sewer and Storm Drain Removal Project, Hunters Point Shipyard, San Francisco, California, June 2013 (CD ROM)
- Building 253 and 211 associated SS/SD Survey Unit Progress Reports (SUPRs 234, 238, 244, 325, 326, 327, 336, and 337) and associated SUPR Abstracts (July 2011 and June 2013) (CD ROM)

SECTION 6 - POINTS-OF-CONTACT

(TO BE PROVIDED AT CONTRACT TASK ORDER AWARD.)

SECTION 7 - DELIVERABLES SCHEDULE MATRIX

Item No.	Deliverable	PWS Reference Paragraph(s)	RPM (# of hard copies/ electronic copies)	RASO (# of hard copies/ electronic copies))	ROICC/ CSO (# of hard copies/ e- copies)	Regulator y Agencies) (# of hard copies/ disks)	Due Date
1	Monthly Progress Reports and Schedule Updates	Section 2.1.1	0/1	0/1	0/2	0/0	Concurrent with monthly invoice issuance
2	Field Reports	Section 2.1.1	0/1	0/1	0/1	0/0	1 working day following field activities
3	Kick Off Meeting Agenda, Schedule, and Figures	Section 2.1.2.1	0/1	0/1	0/1	0/0	48 hours prior to the meeting
4	Kick Off Meeting Minutes	Section 2.1.2.1	0/1	0/1	0/1	0/0	10 days after meeting
5	BCT Presentations	Section 2.1.2.2	0/1	0/1	0/0	0/0	5 working days prior to BCT meeting
6	CIM Presentations	Section 2.1.2.3	0/1	0/0	0/0	0/0	5 working days prior to CIM meeting
7	Community Meeting/Tour Support Presentations	Section 2.1.2.4	0/1	0/1	0/0	0/0	30 working days prior to meeting/tour
9	Planning Documents (Internal Drafts)	Section 2.3	2/2	1/1	1/2	0/0	45 days after kick off meeting
10	Planning Documents (Drafts)	Section 2.3	2/2	1/1	1/2	10/25	15 days after receipt of internal draft comments

Item No.	Deliverable	PWS Reference Paragraph(s)	RPM (# of hard copies/ electronic copies)	RASO (# of hard copies/ electronic copies))	ROICC/ CSO (# of hard copies/ e- copies)	Regulator y Agencies) (# of hard copies/ disks)	Due Date
11	Planning Documents (Finals)	Section 2.3	2/3	1/1	1/2	10/25	30 days after Receiving BCT Comments on Draft Planning Documents
12	QA/QC Audit/Inspection Reports	Section 2.4.3	1/1	1/1	1/1	0/0	Within 5 working days after audit/inspection
16	Survey Unit Project Reports (Internal Drafts)	Section 2.5.1	1/1	1/1	0/1	0/0	30 days after approval to backfill SU.
17	Survey Unit Project Reports (Drafts)	Section 2.5.1	1/1	1/1	1/1	0/0	15 days after receiving Navy comments
18	Survey Unit Project Reports (Finals)	Section 2.5.1	1/1	1/1	1/1	0/0	30 days after receiving BCT comments
19	Final Status Survey Report (Internal Draft)	Section 2.5.2	1/1	1/1	0/1	0/0	30 days after completion of FSS
20	Final Status Survey Report (Draft)	Section 2.5.2	1/3	1/1	0/1	10/25	15 days after receiving Navy comments
21	Final Status Survey Report (Final)	Section 2.5.2	3/3	1/1	1/1	25/35	30 days after receipt of BCT comments

SECTION 8 - PERFORMANCE MEASUREMENT AND PAYMENT SUMMARY

- 8.1 The contractor shall be responsible for achieving the performance objectives in this PWS and successfully performing all the tasks required for successful performance.
- 8.2 Payments shall be made to the contractor upon completion of the following:
- 1) Verification that the corresponding performance standards and Acceptable Quality Levels defined below have been satisfactorily achieved, and
 - 2) Submission of a properly prepared invoice. Invoices that fail to meet the requirements of this paragraph and/or the invoicing or prompt payment clauses of the contract may be rejected in their entirety.
- 8.2.1 If a task associated with a work element is eliminated or not necessary for accomplishing project completion, the payment amount associated with that task shall not be paid to contractor.
- 8.2.2 Failure to demonstrate that the performance objective(s) is achieved and the work elements are complete may result in non-payment of the final work element.

Work Element / Task	Performance Standard	Acceptable Quality Level	Assessment Method	Performance Payment and Incentive
Section 2.1.1 (Project Management)	Accurate and timely cost and schedule management. Accurate and timely meeting support and monthly progress reports.	Subjective	Navy performance evaluations	Lump sum payable monthly as a percentage of completion of each task.
Section 2.1.2.1 (Kickoff Meeting)	Attendees are prompt and appropriately prepared. Meeting is conducted within schedule requirements.	100% on promptness; subjective on preparation	Navy acceptance of meeting materials. Meeting held and minutes prepared within schedule requirements.	Lump sum payable at completion of meeting and upon Navy acceptance of the meeting minutes, schedule and supporting materials.
Section 2.1.2.2 (BCT Meetings)	Attendees are prompt and appropriately prepared. Presentations are clear and concise, and delivered to RPM within schedule requirements. Technical support is provided during the meeting.	100% on promptness; subjective on preparation	Navy acceptance of meeting materials. Meetings attended and presentations submitted within schedule requirements.	Lump sum payable at completion of each BCT meeting and Navy acceptance of BCT meeting material.
Section 2.1.2.3 (Contractor Integration Meeting)	Attendees are prompt and appropriately prepared. Presentation is clear and concise, and delivered to RPM within schedule requirements.	100% on promptness; subjective on preparation	Navy acceptance of meeting materials. Meetings attended and presentations submitted within schedule requirements.	Lump sum payable at completion of each CIM meeting and Navy acceptance of meeting material.

Work Element / Task	Performance Standard	Acceptable Quality Level	Assessment Method	Performance Payment and Incentive
Section 2.1.2.4 (Community Meeting/Tour) Support	Attendees are prompt and appropriately prepared. Presentation is clear and concise, and delivered to RPM within schedule requirements.	100% on promptness; subjective on preparation	Navy acceptance of meeting/tour support materials. Presentation and supporting material submitted within schedule requirements.	Lump sum payable at completion of each community meeting /tour and Navy acceptance of meeting material.
Section 2.2.2 (Mobilization)	Completion of mobilization efforts, such as transport of equipment and personnel to the site, and setup of temporary facilities.	100% Navy acceptance.	ROICC and CSO site inspections.	Lump sum payable monthly as a percentage of completion.
Section 2.2.3 (Site Cleanup and Demobilization)	Demobilize equipment, personnel, and facilities from the site. Clean work area and dispose of all trash and debris.	100% Navy acceptance.	ROICC and CSO site inspections.	Lump sum payable upon receiving final concurrence from ROICC and CSO.
Section 2.2.4 (Logistical Support)	Monthly charges for field trailer, utilities, office and field equipment.	100% Navy acceptance.	ROICC and CSO site inspection.	Lump sum payable monthly as a percentage of completion.
Sections 2.3.1, 2.3.1.1 – 2.3.1.5, and 2.3.2, 2.3.2.1 – 2.3.2.2, 2.3.3 (Planning Documents)	<p>Navy acceptance of deliverables (no resubmittal required due to inadequate content or poor quality).</p> <p>All sections and appendices of the planning documents shall include sufficient information to implement the PWS and obtain the performance objectives.</p> <p>Planning documents must be clearly written, and have minimal transcription, typographical, and grammatical errors.</p>	100% Navy and regulatory acceptance	<p>Navy acceptance by KO, RPM, RASO, ROICC, CSO, and NMCPHC. Concurrence by regulatory agencies.</p> <p>Document submittals must meet deliverable schedule in Section 7.0.</p>	<p>Lump sum payable as a percentage of completion through submission of deliverables to Navy and regulatory agencies. Payment will be individually based processed independently for the completion of the following deliverables:</p> <ol style="list-style-type: none"> 1. Section 2.3.1 Work Plan 2. Section 2.3.1.1 Work Instructions 3. Section 2.3.1.2 SAP 4. Section 2.3.1.3 QA/QC Plan 5. Section 2.3.1.4 RMMP 6. Section 2.3.1.5 APP/SSHP/RPP 7. Section 2.3.1.6 SHPO Letter and Arch. Plan 8. Section 2.3.2.1 SWPP 9. Section 2.3.2.2 DCP

Work Element / Task	Performance Standard	Acceptable Quality Level	Assessment Method	Performance Payment and Incentive
	Planning documents must comply with all applicable codes, standards, and regulations (including the NCP).			<p>10. Section 2.3.3 AM Revision</p> <p>The following milestone limits apply to the payment schedule: 20% of the proposed task cost at distribution of internal draft, 40% of task cost upon acceptance and distribution of draft document by KO, RPM, RASO, ROICC, CSO, NAVFAC SW, and NMCPHC, and 40% of task cost upon acceptance and distribution of final document by Navy and regulatory agencies.</p>
<p>Section 2.4.1, 2.4.1.1 - 2.4.1.3 (Sewer and Storm Drain Removal - including prepare the work area and excavate and remove the sewer and storm drain system, and sample, survey and remediate)</p>	<p>Completion of site preparation, materials and equipment surveys, demolition, excavation, sewer and storm drain removal, and remediation in accordance with the planning documents and with no health and safety incidents.</p> <p>Survey and sample data collection shall occur in a timely manner with no or very minimal schedule delays.</p> <p>Efficient coordination with on-site laboratory and RSY operations.</p> <p>Sample and survey results collected shall be accurately documented and meet SAP requirements for QA/QC procedures. Data shall be uploaded to NEDD-NIRIS as appropriate. Concurrence on meeting removal action completion criteria from BRAC PMO, NFECSW and</p>	100% Navy and regulatory acceptance	Navy acceptance by KO, RPM, RASO, ROICC, and CSO. Concurrence by regulatory agencies.	<p>Lump sum payable as a percentage of task completion. The following milestone limits in the payment schedule are: 30% of the proposed cost at the completion of SS/SD removal; 30% upon meeting clean up goals and or risk mitigation acceptance by Navy; 30% upon concurrence by regulatory agencies; and 10% upon completion and acceptance of site restoration by Navy.</p>

Work Element / Task	Performance Standard	Acceptable Quality Level	Assessment Method	Performance Payment and Incentive
	RASO. Complete backfill and site restoration requirements shall be met. No significant violations of the environmental management plan, i.e. CERCLA Storm Water Plan or air monitoring violations causing work stoppage.			
Section 2.4.1.4 (Backfill and Restore Site Conditions)	Backfill and compact excavations after receiving Navy approval. Restore site conditions.	100% Navy acceptance	Navy acceptance by KO, RPM, RASO, ROICC, and CSO.	Lump sum payable as a percentage of task completion based on percentage of cubic yards backfilled and excavation site restoration.
Section 2.4.2 (Radiological Building Remediation and Surveys)	<p>Completion of building remediation and final status surveys in accordance with the planning documents and with no health and safety incidents.</p> <p>Survey and sample data collection shall occur in a timely manner with no or very minimal schedule delays. Sample and survey results shall be collected in accordance with the planning documents, be accurately documented, and meet SAP requirements for QA/QC procedures.</p> <p>No violations of the RPP or Environmental Protection Plan (e.g. Storm Water, Dust including air monitoring violations causing work stoppage).</p>	100% Navy and Regulatory acceptance	Navy acceptance by KO, RPM, RASO, ROICC, and CSO. Concurrence by regulatory agencies.	Lump sum payable as a percentage of task completion. The following milestone limits in the payment schedule are: 30% of the proposed cost at the completion of the building/site surveys, remediation, and Final Status Surveys. 30% upon meeting clean up goals and or risk mitigation acceptance by Navy; and 40% upon concurrence by regulatory agencies.
Section 2.4.3 (Quality Control)	Quality issues are identified in a timely manner, documented,	100% Navy acceptance	Navy review and approval of QA/QC	Lump sum payable as a percentage of completion through submission of audit

Work Element / Task	Performance Standard	Acceptable Quality Level	Assessment Method	Performance Payment and Incentive
	and corrected promptly.		Audit Reports.	reports submitted to the Navy.
Section 2.5. (Completion Reports)	<p>Navy acceptance of deliverables (no resubmittal required due to inadequate content or poor quality).</p> <p>The SUPR Package reports and FSS Report shall clearly outline the site characteristics, survey and data collection methods, removal action results, and provide ample justifications for no further action and unrestricted free release. The SUPRs and FSS Report must be clearly written, and have minimal transcription, typographical, and grammatical errors.</p>	100% Navy and regulatory acceptance	<p>Navy acceptance by KO, RPM, RASO, ROICC, and CSO. Concurrence by regulatory agencies.</p> <p>Document submittals must meet deliverable schedule in Section 7.0.</p>	<p>Lump sum payable as a percentage of completion through submission of deliverables to Navy. Payment will be individually based given independently for the completion of the following deliverables:</p> <ol style="list-style-type: none"> 1. Section 2.5.1 Survey Unit Project Reports 2. Section 2.5.2 Final Status Survey Report <p>The following milestone limits apply to the payment schedule: 20% of the proposed task cost at distribution of internal draft, 30% of task cost upon acceptance and distribution of draft document by KO or RPM and RASO, and 50% of task cost upon acceptance and distribution of final document by KO, RPM, and FFA signatories.</p>
Section 2.6 (Site Support Activities)	<p>Navy acceptance of Site Support Activities to include:</p> <p>Proper characterization of radiological and mixed wastes for disposal.</p> <p>Efficient processing and manifesting of chemical waste and radiological waste including efficient processing of radiological material through screening yard. Accurate and timely transportation and disposal of waste material from site.</p> <p>Manifests shall conform to all applicable laws and</p>	100% Navy acceptance	<p>Navy acceptance by Contracting Officer (KO), RPM, RASO; ROICC and CSO.</p> <p>Spot visits by Navy, review of field logs and manifest sheets.</p>	Lump sum payable as a percentage of tasks completed.

Work Element / Task	Performance Standard	Acceptable Quality Level	Assessment Method	Performance Payment and Incentive
	<p>regulations; be clearly written; and have minimal transcription, typographical, and grammatical errors.</p> <p>Dust Mitigation and Storm Water measures for waste management must follow the environmental protection plan requirements and be adequately maintained at all times.</p> <p>Factors that influence Navy acceptance include timeliness, completeness and accuracy.</p>			